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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,579	06/04/2001	Martin Hellmark	34650-00517USPT	5679

7590 08/26/2005

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EXAMINER
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DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/874,579	Applicant(s) HELLMARK ET AL.	
	Examiner Raymond S. Dean	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 - 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0302</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see amendment filed May 23, 2005 with respect to the rejection(s) of claim(s) 1 – 27 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art Martin et al. (WO 97/17769). Martin teaches a transmission power level of an initial call set up request for a second message being based upon the first transmission power level stored in a subscriber station (See Page 10, Fourth Paragraph, Page 11, First Paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power method taught above by Martin in the system of Soliman as an alternative means for providing an optimal transmission power level for the first access probe of each subsequent access probe sequence following the first access probe sequence thereby enabling the mobile unit to have faster access to the wireless network as taught by Martin.

Examiner respectfully disagrees with Applicants assertion that Soliman does not teach transmitting at least one second access channel probe for a second message from a mobile station to a base station (See Column 8 lines 32 – 43, there are a plurality of access probe sequences and thus there will be at least one second access channel probe for a second message). Examiner respectfully disagrees with Applicants assertion that Soliman does not teach a first transmission power level that corresponds

to a power level at which the base station acknowledgement is received for at least one first access channel probe (See Column 8 lines 32 – 43, each subsequent access probe within a sequence is transmitted at a power level that is at a higher level than the previous access probe until an acknowledgement is received, the power level at which the acknowledgement is received is the first transmission power level).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman (US 6,785,249) in view of Martin et al. (WO 97/17769).

Regarding Claim 1, Soliman teaches a method for improving open loop power control in spread spectrum telecommunications systems, the method comprising the steps of: transmitting at least one first access channel probe for a first message from a mobile station to a base station (Column 8 lines 32 – 43), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 8 lines 32 – 43); transmitting at least one second access channel probe for a

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second message from the mobile station to the base station (Column 8 lines 32 – 43), wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Soliman does not teach storing the first transmission power level at the mobile station; the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station.

Martin teaches storing the first transmission power level at a subscriber station (Page 11, First Paragraph); the transmission power level of an initial call set up request for a second message being based upon the first transmission power level stored in a subscriber station (See Page 10, Fourth Paragraph, Page 11, First Paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power method taught above by Martin in the system of Soliman as an alternative means for providing an optimal transmission power level for the first access probe of each subsequent access probe sequence following the first access probe sequence thereby enabling the mobile unit to have faster access to the wireless network as taught by Martin.

Regarding Claim 10, Soliman teaches an apparatus for improving open loop power control in spread spectrum telecommunications systems, the apparatus comprising: the specific access channel probe of the at least one first access channel probe being the first access channel probe to receive an acknowledgment from the

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base station (Column 8 lines 32 – 43); at least one processor for determining a second transmission power level of an initial access channel probe of at least one second access channel probe for a second message to be transmitted from the mobile station to the base station (Column 8 lines 32 – 43, there will be a processor for determining the power level of the first access probe of each access probe sequence), and wherein the first transmission power level corresponds to a power level at which the base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Soliman does not teach at least one memory for storing a first transmission power level of a specific access channel probe of at least one first access channel probe for a first message transmitted from a mobile station to a base station; the second transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being determined based upon first transmission power level stored in the at least one memory.

Martin teaches at least one memory for storing a first transmission power level for a first message transmitted from a subscriber station to a base station (Page 11, First Paragraph); the second transmission power level of an initial call set up request for a second message being determined based upon the first transmission power level stored in the at least one memory (See Page 10, Fourth Paragraph, Page 11, First Paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power method taught above by Martin in the

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system of Soliman as an alternative means for providing an optimal transmission power level for the first access probe of each subsequent access probe sequence following the first access probe sequence thereby enabling the mobile unit to have faster access to the wireless network as taught by Martin.

Regarding Claim 19, Soliman teaches an article of manufacture for improving open loop power control in spread spectrum telecommunications systems, the article of manufacture comprising: at least one processor readable carrier; and instructions carried on the at least one carrier; wherein the instructions are configured to be readable from the at least one carrier (Column 8 lines 32 – 43, the mobile station receives instructions to access the network when the user of the mobile station presses the send button, the processor readable carrier is the signal generated when the send button is pushed, said signal instructs said mobile station to enter the access attempt mode) by at least one processor and thereby cause the at least one processor to operate so as to: transmit at least one first access channel probe for a first message from a mobile station to a base station (Column 8 lines 32 – 43), the transmission power level of each access channel probe in the at least one first access channel probe being increased until a base station acknowledgment is received for a specific access channel probe of the at least one first access channel probe at a first transmission power level (Column 8 lines 32 – 43); transmit at least one second access channel probe for a second message from the mobile station to the base station (Column 8 lines 32 - 43), and wherein the first transmission power level corresponds to a power level at which the

base station acknowledgement is received for the at least one first access channel probe (Column 8 lines 32 – 43).

Soliman does not teach storing the first transmission power level at the mobile station; the transmission power level of an initial access channel probe of the at least one second access channel probe for the second message being based upon the first transmission power level stored in the mobile station.

Martin teaches storing the first transmission power level at a subscriber station (Page 11, First Paragraph); the transmission power level of an initial call set up request for a second message being based upon the first transmission power level stored in a subscriber station (See Page 10, Fourth Paragraph, Page 11, First Paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the initial power method taught above by Martin in the system of Soliman as an alternative means for providing an optimal transmission power level for the first access probe of each subsequent access probe sequence following the first access probe sequence thereby enabling the mobile unit to have faster access to the wireless network as taught by Martin.

Regarding Claims 2, 11, 20, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further inherently teaches storing a recently measured received code power from the base station at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured received code power (Column 8 lines 32 – 43, it is well established in the art



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that that the nominal open-loop power level is determined using a path loss estimate between the mobile station and the base station, said path loss estimate is determined by the base station transmitting a pilot signal at a particular power level (code power) and subtracting said code power from the transmitted power level of said mobile station, using said path loss estimate and a target signal to interference ratio (SIR) a nominal power level will be set, there is therefore an inherent storage of received code power).

Regarding Claims 3, 12, 21, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further inherently teaches storing a recently measured base station interference level at the mobile station, the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message being further based upon the recently measured base station interference level (Column 8 lines 32 – 43, it is well established in the art that that the nominal open-loop power level is determined using a path loss estimate between the mobile station and the base station, said path loss is determined by the base station transmitting a pilot signal at a particular power level (code power) and subtracting said code power from the transmitted power level of said mobile station, using said path loss estimate and a target signal to interference ratio (SIR), which includes the base station interference level, a nominal power level will be set, there is therefore an inherent storage of the base station interference level).

Regarding Claims 4, 13, 22, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the first

message is a first packet and the second message is a second packet in a packet mode transmission (Column 3 lines 45 – 65).

Regarding Claim 5, 14, 23, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is based upon a path loss between the mobile station and the base station (Column 9 lines 5 – 20).

Regarding Claims 6, 15, 24, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 5, 14, 23. Soliman further teaches wherein the transmission power level of an initial access channel probe of the at least one first access channel probe for the first message is further based upon a base station interference level (Column 9 lines 5 – 20).

Regarding Claims 7, 16, 25, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to the first transmission power level than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 8 lines 32 – 43, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the transmission power level required for acknowledgement, this means that the power

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level of the second access probe can be closer to said required power level due to the nature of the electronics).

Regarding Claims 8, 17, 26, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 1, 10, 19. Soliman further teaches wherein the transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is closer to a transmission power level that is required to have the initial access channel probe reach the base station than a transmission power level of an initial access channel probe of the at least one first access channel probe for the first message (Column 8 lines 32 – 43, the fact that there are electronic circuits involved in transmitting the signal from the mobile station means that the actual transmitted power from said mobile station will vary from the required power level, this means that the power level of the second access probe can be closer to said required power level due to the nature of the electronics).

Regarding Claim 9, Soliman in view of Martin teaches all of the claimed limitations recited in Claim 1. Soliman further teaches wherein the transmission power level of the second message is at or slightly above a transmission power level that is required to have the second message reach the base station (Column 8 lines 32 – 43, the actual transmit power of said mobile station will vary from the required power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said required power level).

Regarding Claim 18, 27, Soliman in view of Martin teaches all of the claimed limitations recited in Claims 10, 19. Soliman further teaches wherein the second

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transmission power level of the initial access channel probe of the at least one second access channel probe for the second message is at or slightly above a transmission power level that is required to have the second message reach the base station (Column 8 lines 32 – 43, the actual transmit power of said mobile station will vary from the required power level due to the nature of the electronic circuits thus said actual transmit power can be at or slightly above said required power level).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on 6:00-2:30.

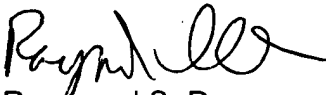
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

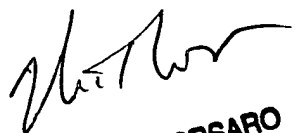
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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On July 15, 2005, the Central FAX Number will change to **571-273-8300**. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and **571-273-8300** will be the only facsimile number recognized for "centralized delivery".

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

  
Raymond S. Dean  
August 19, 2005

  
NICK CORSARO  
PRIMARY EXAMINER